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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

GRAYBILL, DAVID E

ART UNIT PAPER NUMBER

2822

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,355

Applicant(s)

NOGIWA ET AL.

Examiner

David E. Graybill

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-44 is/are pending in the application.
- 4a) Of the above claim(s) 35-37 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-34, 38-40 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 and 10 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Newly submitted claims 35-37 and 41 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: They are drawn to non-elected species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 35-37 and 41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claims 27 and 44 limitations, "said first and second adhesive holding regions not overlapping each other," and, "said first and second adhesive regions not overlapping each other," respectively, must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the

replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 27-34, 38-40 and 42-44 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility.

Specifically, in claims 27 and 44, the limitations, "said first and second adhesive holding regions not overlapping each other," and, "said first and second adhesive regions not overlapping each other," respectively, are not supported by either a specific and substantial asserted utility or a well established utility.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27-34, 38-40 and 42-44 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Claims 27-34, 38-40 and 42-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The undescribed subject matter is the claims 27 and 44 limitations, "said first and second adhesive holding regions not overlapping each other," and, "said first and second adhesive regions not overlapping each other," respectively. To continue to afford applicant the benefit of compact prosecution, it is noted that Figures 17 and 19-21 cannot be relied on as written description in the specification for these limitations because Figures 17 and 19-21 are drawn to the non-elected species wherein the first adhesive holding region and the second adhesive holding region are

differentiated in level. Furthermore, the disclosure drawn to the elected species wherein the first adhesive holding region and the second adhesive holding region are provided within one plane cannot be relied on as written description in the specification because the first adhesive holding region and the second adhesive holding region overlap (extend over and cover a part of, and have something in common) at their intersection. Moreover, the limitations, "said first and second adhesive holding regions not overlapping each other," and, "said first and second adhesive regions not overlapping each other," are negative limitations, and any negative limitation or exclusionary proviso must have basis in the original disclosure. See *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation or drawing illustration is not basis for an exclusion. To this end, it is noted that this rejection might be overcome if the negative limitations are restated using positive terminology.

In the rejections *infra*, generally, reference labels are recited only for the first recitation of identical claim elements.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27-29, 34, 38, 42 and 44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kuhns (20040119593).

At paragraphs 28-33,40-45, 52, 56 and 65 Kuhns discloses the following:

A substrate holder for holding a circuit board, comprising: a main body "liner"; and a holding surface formed on the main body for allowing a circuit board 10 to adhere to the holding surface, wherein the holding surface includes: a first adhesive 19a holding region for holding the circuit board with a first tackiness ("permanently tacky" and "adhesive strength"); and a second adhesive 19b holding region for holding the circuit board with a second tackiness which is different from the first tackiness, said first and second adhesive holding regions not overlapping each other (at least in any sense allegedly disclosed by applicant) and being capable of holding the circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body; an adhesive material 19a, 19b provided on said main body, said first adhesive holding region and said second adhesive holding region being on a surface of said adhesive material; wherein the first adhesive

holding region and the second adhesive holding region are within one area of the adhesive material on said main body; wherein the first adhesive holding region and the second adhesive holding region are within one plane; wherein the first tackiness is less than the second tackiness and the second adhesive holding region is confined within the first adhesive holding region; wherein the holding surface comprises a plurality of sets of the first adhesive holding region and the second adhesive holding region ("at least two different portions 19a, 19b with varying adhesive strengths" and "any number of different portions of adhesives with differing or similar adhesive strengths").

A pallet for carrying a circuit board comprising: a main body; and a holding surface formed on the main body for allowing a circuit board to adhere to the holding surface, wherein the holding surface includes: a first adhesive holding region for holding the circuit board with a first tackiness; and a second adhesive holding region for holding the circuit board with a second tackiness which is different from the first tackiness, said first and second adhesive regions not overlapping each other and being capable of holding the circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 29 supra, and further in combination with Otaki (20030059565) and Oura (6286207).

Kuhns does not appear to explicitly disclose Claim 30 (New) The substrate holder of claim 29, wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material, and the first adhesive holding region and the second adhesive holding region have different surface undulation characteristics; wherein the first adhesive holding region and the second adhesive holding region have different surface coarseness.

Nonetheless, at paragraphs 183-186, 189, and 456-459, Otaki discloses wherein a first adhesive and a second adhesive having different tackiness "adhesive strengths" are composed of the same adhesive material "adhesive common to two adhesives is provided as a main component . . . and a tackifier resin added to the pressure-sensitive adhesive are varied to create an adhesive strength different between the two adhesives."

Moreover, it would have been obvious to combine this disclosure of Otaki

with the disclosure of Kuhns because it would facilitate provision of the first and second adhesives having the first and second tackinesses of Kuhns.

Furthermore, as cited, Kuhns discloses "two different adhesives." In addition, as cited, Otaki discloses that two different adhesives "different pressure-sensitive adhesives having different adhesive strengths" and "a first adhesive and a second adhesive having different tackiness are composed of the same adhesive material" are alternatives and equivalents; therefore, as reasoned from well established legal precedent, it would have been obvious to substitute or combine the same adhesive material of Otaki for or with the two different adhesives of Kuhns. See *In re May* (CCPA) 136 USPQ 208 (It is our opinion that the substitution of Wille's type seal for the cement of Hallauer in Figure 1 would be obvious to persons of ordinary skill in the art from the disclosures of these references, merely involving an obvious selection between known alternatives in the art and the application of routine technical skills.); *In re Cornish* (CCPA) 125 USPQ 413; *In re Soucy* (CCPA) 153 USPQ 816; *Sabel et al. v. The Wickes Corporation et al.* (DC SC) 175 USPQ 3; *Ex parte Seiko Koko Kabushiki Kaisha Co.* (BdPatApp&Int) 225 USPQ 1260; and *Ex parte Rachlin* (BdPatApp&Int) 151 USPQ 56. See also *Smith v. Hayashi*, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view,

presents strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted). "For example, where a claimed apparatus requiring Phillips head screws differs from a prior art apparatus describing the use of flathead screws, it might be hard to find motivation to substitute flathead screws with Phillips head screws to arrive at the claimed invention. However, the prior art would make it more than clear that Phillips head screws and flathead screws are viable alternatives serving the same purpose. Hence, the prior art would 'suggest' substitution of flathead screws for Phillips head screws albeit the prior art might not 'motivate' use of Phillips head screws in place of flathead screws. Ex parte Jones, 62 USPQ2d 1206 (BdPatApp&Int 2001). See also In re Crockett, 279 F.2d 274, 126

USPQ 186 (CCPA 1960); Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

Also, at column 16, lines 46-65; column 29, lines 6-14; and column 30, line 52 to column 31, line 19, Oura discloses a first adhesive holding region "the boundary between the adhesive and the interposer" before the circuit board is treated) and a second adhesive holding region (the boundary between the adhesive 199 and the interposer 191 after the circuit board is treated) have different surface undulation characteristics; wherein the first adhesive holding region and the second adhesive holding region have different surface coarseness.

To further clarify, the surface undulation characteristics and coarseness of the first adhesive holding region are in a range between the surface undulation characteristics and coarseness of the second adhesive holding region and undulation characteristics and coarseness equal to zero. Moreover, it would have been obvious to combine this disclosure of Oura with the disclosure of Kuhns and Otaki by providing the second adhesive holding region of Kuhns and Otaki with the surface undulation characteristics and coarseness of the second holding region of Oura because it would facilitate provision of the second adhesive strength greater than the first adhesive strength of Kuhns and Otaki. Indeed, it has been held that it is obvious to combine two processes for the same purpose. In re Novak 16

USPQ2d 2043. Similarly, "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted). (Claims to a process of preparing a spray - dried detergent by mixing together two conventional spray - dried detergents were held to be prima facie obvious.). See also, In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (Mixture of two known herbicides held prima facie obvious).

Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 27, and further in combination with Nishikawa (07074497).

As cited supra, Kuhns discloses wherein an inherent air outlet (the second adhesive region) is provided in the second adhesive region.

To further clarify, the language "air outlet" is a statement of intended use of the adhesive region that does not appear to result in a structural difference between the claimed adhesive region and the adhesive region of Kuhns. Further, because the adhesive region of Kuhns appears to have the same structure as the claimed adhesive region, it appears to be capable of being used for the intended use, and the statement of intended use does not patentably distinguish the claimed adhesive region from the adhesive region of Kuhns. The manner in which a product operates is not germane to the issue of patentability of the product; *Ex parte Wikdahl* 10 USPQ 2d 1546, 1548 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889, 1891 (BPAI 1988); *In re Finsterwalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235, 238 (CCPA 1967). Also, "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim."; *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). And, "Inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims."; *In re Young*, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 136 USPQ 458, 459 (CCPA 1963)). And, claims directed to product must be distinguished from the prior art in terms of structure rather than function. *In re Danley*, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does [or is intended to do]."

Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). In any case, although Kuhns does not appear to explicitly disclose the process limitation, "wherein an air outlet is provided in the second adhesive region," this process limitation does not structurally limit the product of Kuhns, and the product of Kuhns could be made by the process. To further clarify, the process does not limit the product to any particular structure, such as an air outlet because the scope of the claims encompasses provision of intermediate structure which is not necessarily present in the final product. For example, the transitional claim language "comprising" is inclusive of additional process steps such as a process of removing the air outlet so that the air outlet is not present in the claimed product or in the product of Kuhns.

However, Kuhns does not appear to explicitly disclose wherein a through hole for receiving a pin is in the first adhesive region, the through hole being usable by the pin for peeling off the circuit board.

Notwithstanding, in the English translation, abstract and drawings, Nishikawa discloses a wherein a through hole 4 for receiving a pin 5 is in the first adhesive region 3, the through hole being usable by the pin for peeling off the circuit board 2. Moreover, it would have been obvious to combine this disclosure of Nishikawa with the disclosure of Kuhns because it would facilitate release of the release liner of Kuhns.

In the alternative, claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 39, and further in combination with Mikami (20030178124).

Kuhns does not appear to explicitly disclose wherein an air outlet is provided in the second adhesive region.

Still, at paragraphs 5, 27, 43, 44, 70 and 72, Mikami discloses wherein an air outlet 24 is provided in an adhesive region 18. Moreover, it would have been obvious to combine this disclosure of Mikami with the disclosure of Kuhns because it would provide egress for trapped air.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 28, and further in combination with Suzuki (6110595).

Kuhns does not appear to explicitly disclose wherein the adhesive material comprises silicone rubber, polyurethane rubber or fluorine rubber.

Regardless, at column 5, lines 59 to 67, Suzuki discloses wherein an adhesive material comprises silicone rubber. In addition, it would have been obvious to combine this disclosure of Suzuki with the disclosure of Kuhns because it would facilitate provision of the rubber pressure sensitive adhesive of Kuhns.

Applicant's remarks filed on 7-10-6 have been have been fully considered and are adequately treated supra.

The art made of record and not applied to the rejection is considered pertinent to applicant's disclosure. It is cited primarily to show inventions relevant to the examination of the instant invention.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

For information on the status of this application applicant should check PAIR:

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.

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Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours:

Monday through Friday, 8:30 a.m. to 6:00 p.m.

The fax phone number for group 2800 is (571) 273-8300.



David E. Graybill
Primary Examiner
Art Unit 2822

D.G.

28-Sep-06